ADVANCED DISTRIBUTED LEARNING

The New ADL Registry

ADL Registry Web Portal Changes

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ADL Registry Web Portal Changes

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ADL Registry Informational Site

- http://www.adlnet.gov/Technologies/adlr/
 - News and Announcements
 - Frequently Asked Questions (FAQ)
 - Documentation
 - Events and Event Registration





ADL Registry Functional Site

- http://adlregistry.adlnet.gov
 - Search
 - Contribute
 - Register Repositories and Contributors
 - Practice Registry
 - Help and Contact Information





ADL Registry Changes





ADL Registry Changes

- Identifiers
- Registry Transaction Envelope
- LOM Overview
- Search Results



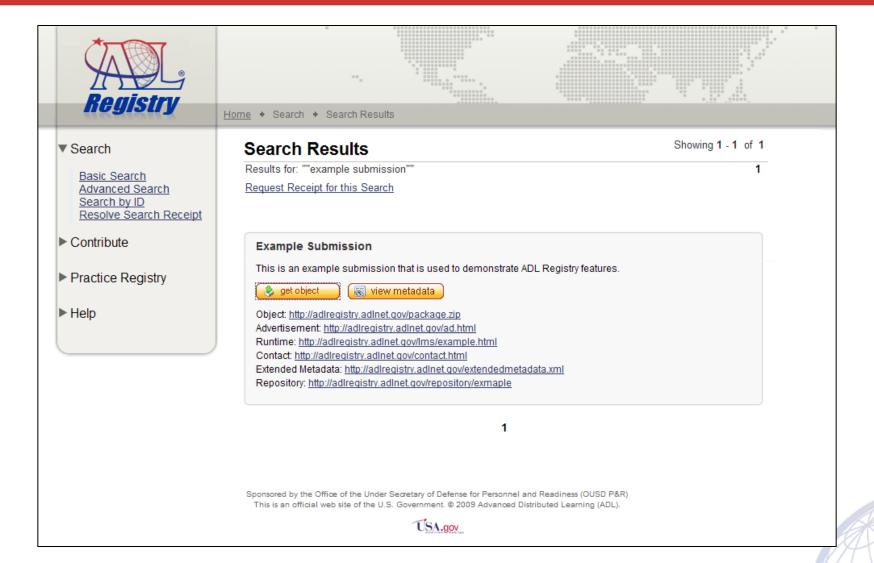


Registry Transaction Envelope

- Multiple, Typed URLs
- Types of URLs
 - object Direct link to the object itself, no authentication required
 - advertisement link to information about the object (preview, screenshot, etc.)
 - runtime link to the object in a runtime environment
 - contact link to information about a contact through which the object may be requested
 - extended metadata link to additional metadata
 - repository link to the object in a repository, authentication may be required



Search Results





ADL Registry 1.7 Metadata Changes



LOM Changes Overview

- 'conformance' was replaced with 'compliance'
- 'content object' was replaced with 'object'
- Additional support for Educational Objectives and Competencies
 - Represented in <classification> elements
- Additional values for 'complies with' classification
- Additional values for 'object type' classification



- 'conformance' to 'compliance'
 - LOM Classifications
 - 'conforms to' >> 'complies with'
 - 'ADL/DOD Conformance Taxonomy' >> 'ADL/DOD Compliance Taxonomy'



- 'content object' to 'object'
 - XML Elements
 - contentObjectDescriptor >> objectDescriptor
 - cordraContentObject >> cordraObject
 - contentObjectIdentifier >> objectIdentifier
 - contentObjectLocation >> objectLocation
 - communityContentObject >> communityObject
 - LOM Classifications
 - 'content type' >> 'object type'
 - 'ADL/DOD Content Type Taxonomy' >> 'ADL/DOD Object Type Taxonomy'
 - 'ADL/DOD Content Category Taxonomy' >>
 - 'ADL/DOD Object Category Taxonomy'



- Additional support for Educational Objectives and Competencies
 - Create a lom:classification element
 - Set value to lom:classification/lom:purpose/lom:value 'educational objective' or 'competency'
 - Set values for
 - Iom:classification/lom:taxonPath/source
 - lom:classification/lom:taxonPath/lom:taxon/lom:id
 - lom:classification/lom:taxonPath/lom:taxon/lom:entry



- Additional values for 'complies with' classification
 - SCORM 2004 3rd Edition
 - SCORM 2004 4th Edition
 - SCORM Version 1.2
 - \$1000D V2.0
 - S1000D V2.1
 - S1000D V2.2
 - \$1000D V2.3
 - S1000D V3.0
 - S1000D V4.0
 - IEEE 1484.20.1-2007 RCD
 - other



- Additional values for 'object type' classification
 - SCO
 - aggregation
 - other



ADL Registry Use Cases

Jason Haag



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Introduction





Overview

- Success Stories (Navy & JKDDC)
- Similar Challenges
- Technical Approaches



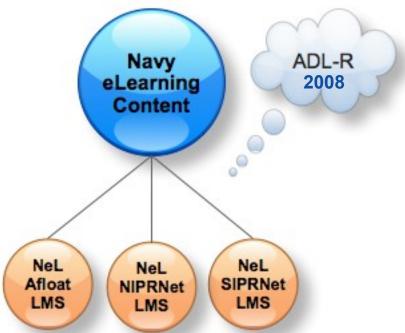
Primary ADL Registry Contributors

Contributor	Records	Entry Date
Navy eLearning (US Navy)	2,086	08/05/2008
Joint Knowledge Development and Distribution Capability (JKDDC)	127	4/01/2007
Defense Ammunition Center	76	09/08/2008



Use Case: U.S. Navy

 Currently deploys more than 4,000 custom catalog items (content packages) to multiple environments and platforms





U.S. Navy Organizational Challenges

- Lack of consistent metadata for learning content
 - Most content was created prior to the establishment of Navy content development policy, guidelines, and DoD Instruction 1322.26
- Many learning programs in "legacy state" of maintenance
 - Lack of funding and/or resources to move to a more mature state of life-cycle management



U.S. Navy Technical Challenges

- Metadata was available for all of the learning content, but it was not always included in the SCORM content package
 - Hosting process required manual input into the LMS but only course-level (aggregate)
- CMAD Repository was no longer operational
 - R&D project unable to transition to enterprise data center
 - Provided capability to populate ADL-R using RIM-LITE
- Lack of tools for new content development efforts
 - All new metadata would have to be updated/modified by the technical implementer to support the ADL-R



U.S. Navy Situation

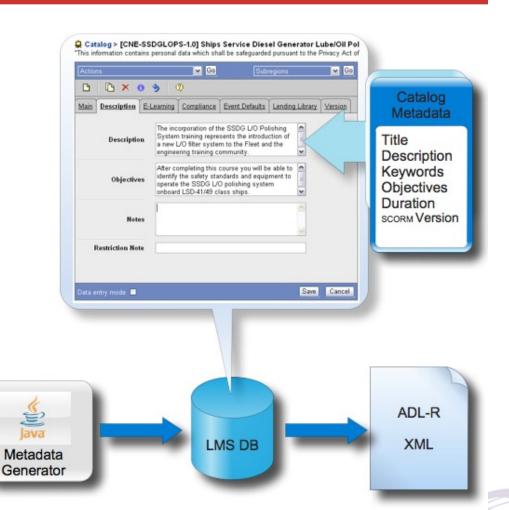
- All metadata wasn't always included in the content package
- The Navy's LMS contained this metadata for each catalog item (course aggregation)
 - Title
 - Description
 - Keywords
 - Instructional Hours (Duration)
 - SCORM Version



U.S. Navy Approach

Populate the ADL
 Registry with a single insert transaction file generated by the custom utility

 Develop utility to extract metadata from the LMS





/lom:typicalLearningTime>

</loa:educational>

U.S. Navy Approach

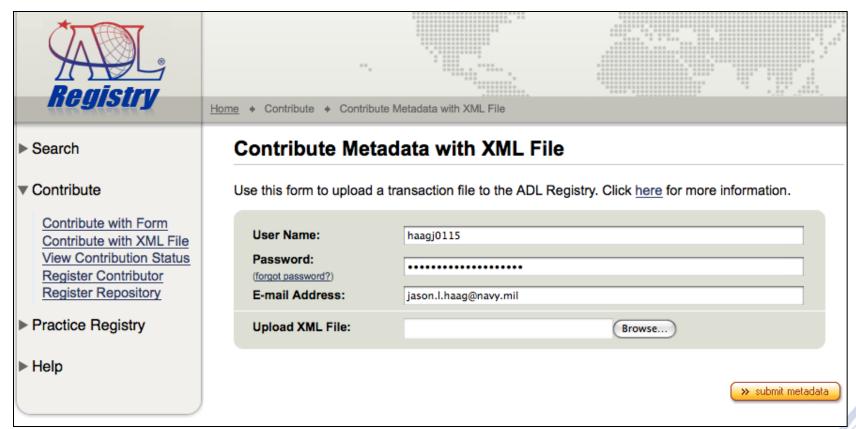
```
<lom:identifier>
       lom:catalog>NeL</lom:catalog>
      <lom:entry>R-500-0140/02PG</lom:entry>
    </loan:identifier>
    <lom:title>
       <lom:string language="en-US">NROWS Orders Administration Course/lom:string>
    </low:title>
    <lom:keyword>
      lom:string language="en-US">NROWS</lom:string>
    </lom:kevword>
    <lom:keyword>
      <lom:string language="en-US">Orders
    </lom:keyword>
    <lom:keyword>
       <lom:string language="en-US">Administration</lom:string>
    </lom:keyword>
    <lom:keyword>
       lom:string language="en-US">Course
    </lom:keyword>
    <lom:description>

</p
of the order submission and approval process from which all Members will benefit. This course provides an introduction to AT/ADT/IDTT Orders Policy; NROWS Roles
and Responsibilities; Maintaining NROWS; Unit Reviewer and Unit Approver Menus and Procedures; Order Writing Authority (OWA) and Orders Specialist (OS) Menus;
Orders Verification Submission and Approval; Email Notifications; and NROWS Reports. 
    </lorn:description>
       <lom:source>ADL-Rv1.0</lom:source>
       lom:value>conforms to</lom:value>
    </lom:purpose>
    <lom:taxonPath>
       <lom:source>
         <lom:string>ADL/DOD Conformance Taxonomy</lom:string>
       </low:source>
       <lom:taxon>
         <lom:entry>
           <lom:string>SCORM Version 1.2
         </lom:entry>
       </lom:taxon>
    </lom:taxonPath>
  <lom:educational>
    <lom:typicalLearningTime>
       lom:duration>PT8H0M0S</lom:duration>
```



U.S. Navy Approach

 Populate the ADL Registry with a single insert transaction file generated by the custom utility



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Use Case: JKDDC





JKDDC Technical Challenges

- Lack of metadata for learning content
 - Majority of the content was created prior to the establishment of DoD Instruction 1322.26
- Metadata was not always included in the SCORM content package
 - Would have to manually create metadata using source materials



JKDDC Approach

- Reviewed each piece of content
 - Used instructional lesson plans, storyboards, etc. to locate relevant metadata
 - Manually created new metadata and entered it into a database that supported
 - Title
 - Description
 - Keywords
 - Duration
- Created wrapper utility to generate XML for the ADL Registry
 - Each insert file contained 20 content aggregation records



U.S. Navy & JKDDC Current Status



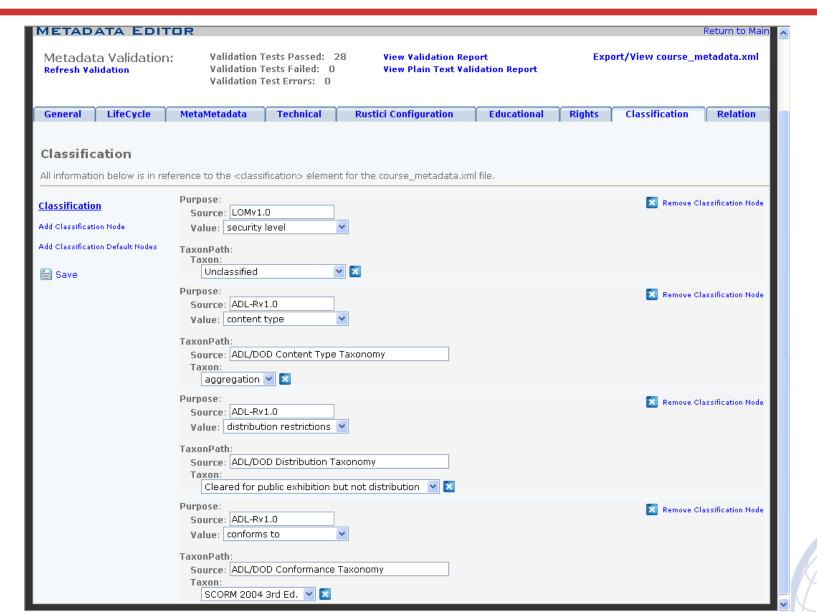


Current Status – U.S. Navy

- NeL in-house content deployment tracking application doesn't currently support ADL Registry
 - Navy lacks funding and additional resources to update this application
 - Manual ADL Registry population could be automated if an interface for RIM-LITE were added
 - NeL TestTrack Metadata Editor supports new content development efforts to include all LOM elements and ADL Registry-specific metadata



U.S. Navy Metadata Editor Support for ADL Registry



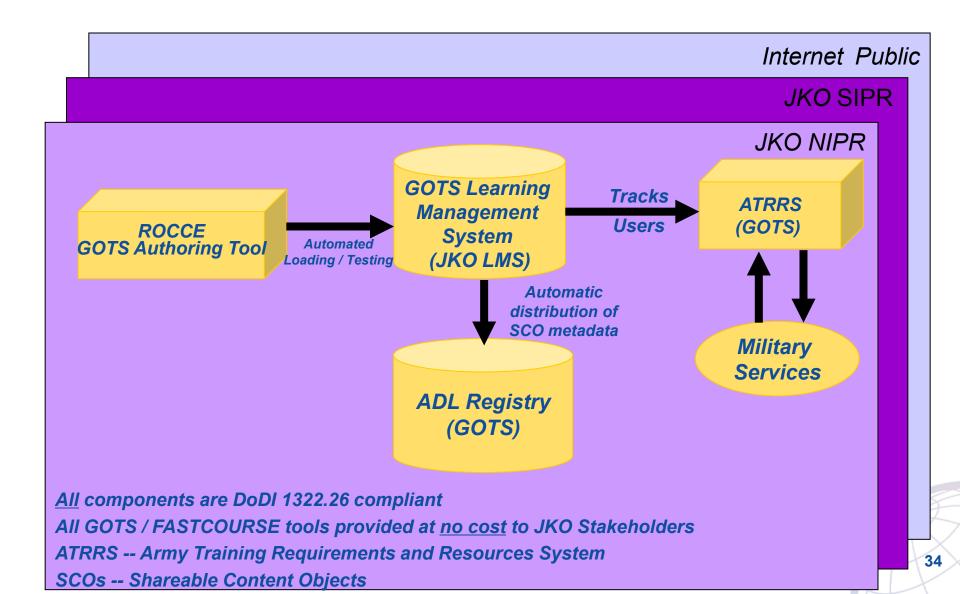


Current Status - JKDDC

- Uses a Rapid Online Content Creation Engine (ROCCE) to create metadata as part of the Atlas Pro Engine
 - Atlas Pro LMS supports RIM-LITE
 - ADL Registry is currently a public registry
 - JKDDC will resume ADL Registry updates when a miliraty domain (.mil) network is available.



JKO Joint Content Management Architecture





Summary

- Don't let technical challenges stand in your way
 - Locate metadata outside of the content package
 - Instructional Plans
 - LMS DB
 - LCMS
 - etc.
 - Contact ADL for support



Resources

- ADL Initiative
 - http://www.adlnet.gov/
- ADL Registry
 - http://adlregistry.adlnet.gov/
- Navy eLearning Content Team
 - https://www.netc.navy.mil/ile
- Joint Knowledge Online
 - http://jko.jfcom.mil/



References

- The ADL Registry and CORDRA, Volume 2: ADL Registry Overview and User Guide
 - http://adlregistry.adlnet.gov/
- DoD Instruction 1322.26, Development, Management, and Delivery of Distributed Learning, June 2006
 - http://www.dtic.mil/whs/directives/corres/html/132226.htm



Questions or Comments?

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